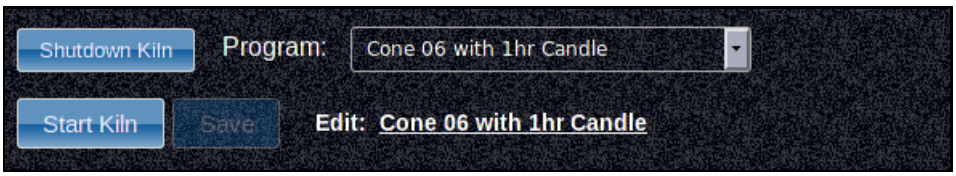
*e*Master Web Manual

Installed Programs Page

This page displays the firing program that is currentlly loaded. And if the kiln is firing the status of the firing is displayed.

The page is dynamically updated once every minute so if a new program is install or the current program is modified the page will reflect the the correct data. The time the page was last updated appears at the top of the page.

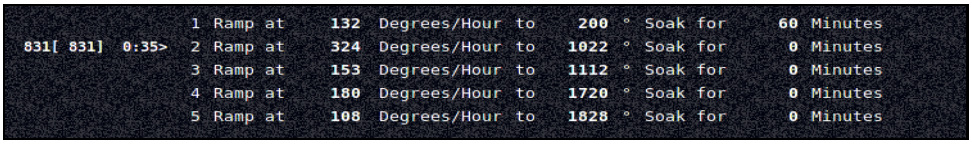
The Buttons



The first a button that will stop the firing Shutdown Kiln. Next the button that will start the firing Start Kiln next button allows changes, if any, to be saved to the current program file Save. Changes made on this page do not change the program permanently. They only affect the current firing unless Save is clicked.

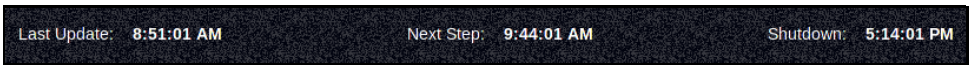
Next to Save is a link that has the file name of the program. The link goes to the **Ramp/Soak Programming** page with the current program loaded. If at this time (after going the **Ramp/Soak Programming** page) you make changes to the firing program Install Program must be pressed for any changes to be reflected in the current firing program installed.

The Program



Below the buttons is a list of the program segments. Starting with the segment or step number. The step number is a sequential number starting at 1 and ends with the number of the last step. Then the ramp in degrees per hour followed by the target temperature in degrees Fahrenheit. And lastly the soak time in minutes.

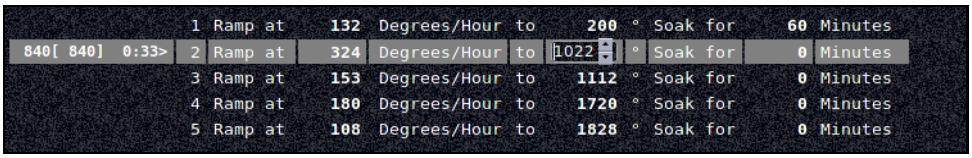
Firing



When the kiln is firing there will appear at the top of the tab, following the **Last Update:** field, two new fields. One indicating at what time the current segment will end, labeled **Next Step:** and one indicating when the firing will end **Shutdown:**.

Note that ending means when the final segment has ended *not* when the kiln is back to ambiance temperature.

In front of the step numbers when the firing is in progress will appear three numbers. The first is the current kiln temperature followed by the set temperature (the temperature that the program is trying to achieve at the current time), followed by the number of minutes left in this segment or step.



At any time before or during firing the program can be modified by clicking on the value and entering to new value. Note that when the mouse pointer is in position over the number to be changed a tool tip will appear reading Click to edit... At this point click the mouse and enter the new value followed by the *Enter* key. To save the changes to the program file, in effect changing the firing file permanently, click the Save.

Ramp/Soak Programming Page

This page is where firing schedules are programed or modified.

Ramp File

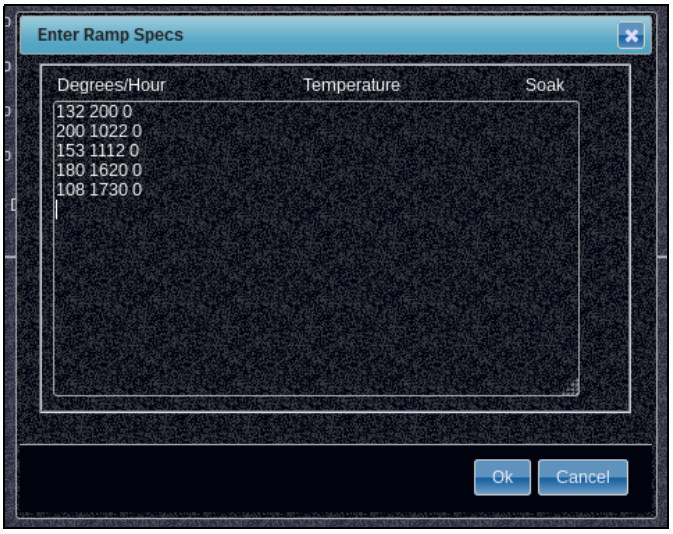
Allows the selection of saved firing schedules. The ramp files are stored in the ramp directory which can accessed with the file browser found under the ***Files*** tab on the **Installed Program** page.

The Buttons

Install Program loads the fire controller with the displayed program. Note that it is not the program in the selected file but the program as it is currently displayed in the ***Programming Section*** below.

Bulk Add display a dialog box that allows firing schedules to be entered as three simple columns of numbers. Each line represents a step or program segment.

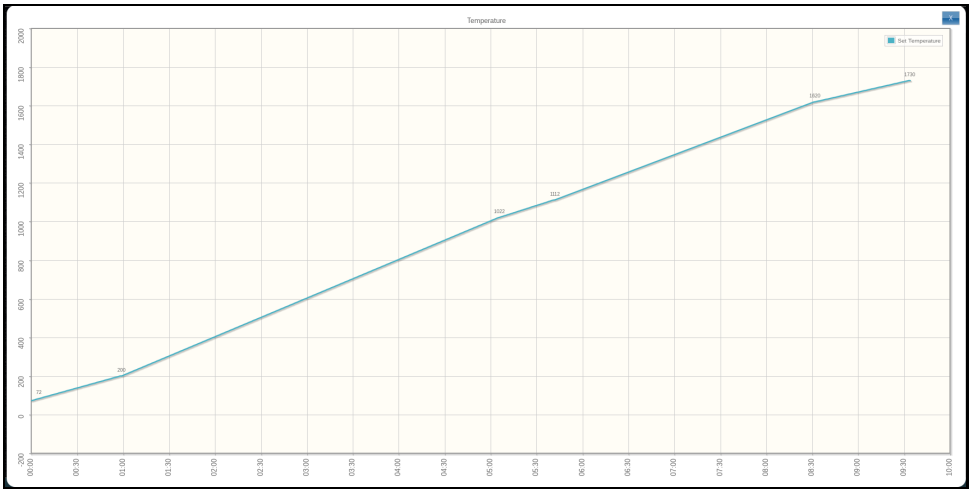
1. The first column is the rate or ramp in degrees per hour Fahrenheit.
2. The second column is the target temperature in Fahrenheit.
3. The last column is the hold or soak time in minutes.



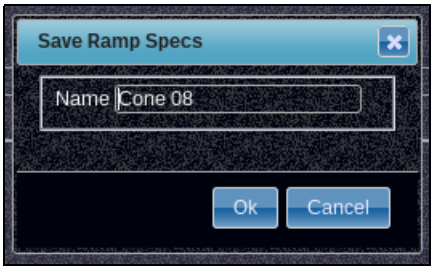
Clear clears the ***Programming Section*** of all ramps or segments without changing the selected ***Ramp File***. Note selecting ***--Select Program--*** will also clear the ***Programming Section***.

Reload will re-read the ***Ramp File*** that is currently selected. Any change in the ***Programming Section*** will be lost unless the Save has been clicked.

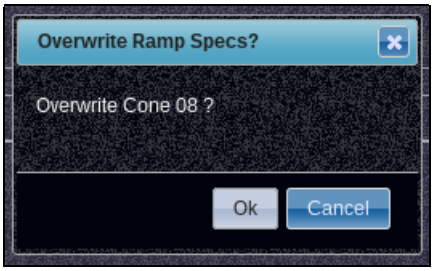
Plot displays a plot of the current program in the ***Programming Section***.



Save saves the program currently displayed in the ***Programming Section*** to the selected file. A dialog box will appear displaying the current selected file name.



At this point the file name may be changed and a new file created or the current file may be over written. Whenever the file being saved already exists a second dialog box will appear asking if this is Ok.



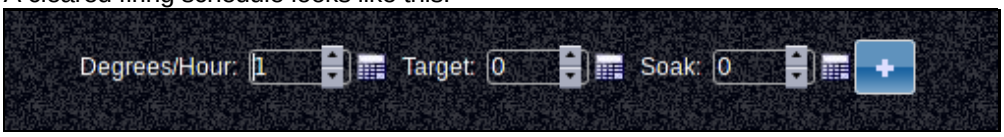
The Schedule Programming Section

This is the primary way to enter or modify firing schedules.

A typical firing schedule will look like this:

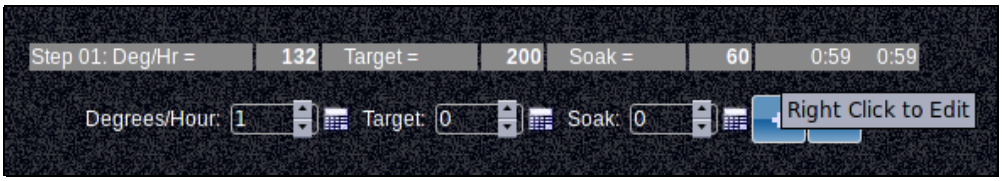
New firing schedules are entered by selecting ***--Select Program--*** in the ***Ramp File:*** selector or clicking Clear.

A cleared firing schedule looks like this:



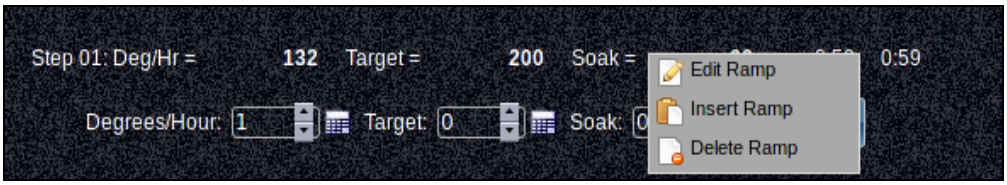
Simply enter the value followed by the Enter key. The focus will move to the next value to be entered. When the ***Soak*** value is entered and the Enter key is pressed a new ramp input line will appear and the ramp or segment is recorded.

To erase the previous ramp or segment click on . To modify it place the mouse cursor over it and click.



At any time right clicking a given ramp segment will invoke an edit menu with three options.

1. Edit Ramp (Same as left clicking the ramp segment)
2. Insert Ramp (Insert a ramp segment before the current segment)
3. Delete Ramp (Deletes the current ramp segment)



Current Status Page

This information updates ever 30 seconds.

Current Temperature	The current temperature in the kiln as read by the thermocouple
Set Point	The Set Point is the temperature the fire controller is currently trying to achieve
Ramping (Deg/Hr)	This the current ramping rate degrees per hour
Target Temperature	This is the maximum temperature for this segment
Current Step	This is the number of the segment currently firing
Time Remaining This Step	The amount time until the next segment begins
Total Time Remaining	The amount time until the shutdown
Amps	The current flow in Amperes when the heating elements are energized
Alarm	This parameter is only visiable when the kiln is in an alarm condition
Status	The status is ***Shutdown, Ramping, Soaking or Aborted***

Firing Plot Page

This is the graphic display of actual firings.

The plot is updated once a minute.

There are two selections that can be made.

1. ***Plot Dimensions***
   The Dimension refers to plot size in pixels. The ***Auto*** will adjust the size to the best fit for the current screen size.
2. ***Available Plots***
   Are files which contain a record of a firing. The file ***cur_temp.log*** contains the current firing or the most recent firing. Past firing files are named starting with date time and ending with *_temp.log*.

After the selectors there is a field which indicates the last time the plot was updated. And another which indicates the highest temperature recorded for the kiln.

Note the temperature logs are only updated when the kiln is firing or the temperature in the kiln is higher than 100° Fahrenheit.

System Setup Page

Setup Tab

Alarm Settings

There are four alarm settings:

1. ***Maximum Heating Lag***
   This value trips the **Failure to Heat** alarm. Which in when the kiln temperature falls too far below the set temperature.
2. ***Maximum Over Heat***
   This value trips the **Over Heat** alarm. Which is when the kiln temperature is too far above the set temperature during ramp-up.
3. ***Maximum Cooling Lag***
   This value trips the **Failure to Cool** alarm. Which is when the kiln temperature is too far above the set temperature during ramp-down.
4. ***Abort on Over Heat***
   When a **Over Heat** alarm occurs should the firing be aborted or not.

eMailing Alarms

The eMail addresses in this list will be sent an eMail message when ever an alarm occurs. To enter an address type the address in and click  . To delete an address click  next to the address to be deleted.

For text message alarms sent to a cell phone:

T-Mobile:	*phonenumber*@tmomail.net
Virgin Mobile:	*phonenumber*@vmobl.com
Cingular:	*phonenumber*@cingularme.com
Sprint:	*phonenumber*@messaging.sprintpcs.com
Verizon:	*phonenumber*@vtext.com
Nextel:	*phonenumber*@messaging.nextel.com
US Cellular:	*phonenumber*@email.uscc.net
SunCom:	*phonenumber*@tms.suncom.com
Powertel:	*phonenumber*@ptel.net
AT&T:	*phonenumber*@txt.att.net
Alltel:	*phonenumber*@message.alltel.com
Metro PCS:	*phonenumber*@MyMetroPcs.com

File Tab

This tab contains a file browser that has access to a select directory structure of files that are relevant to the eMaster. For help using the file browser click on the 

in the tool bar.